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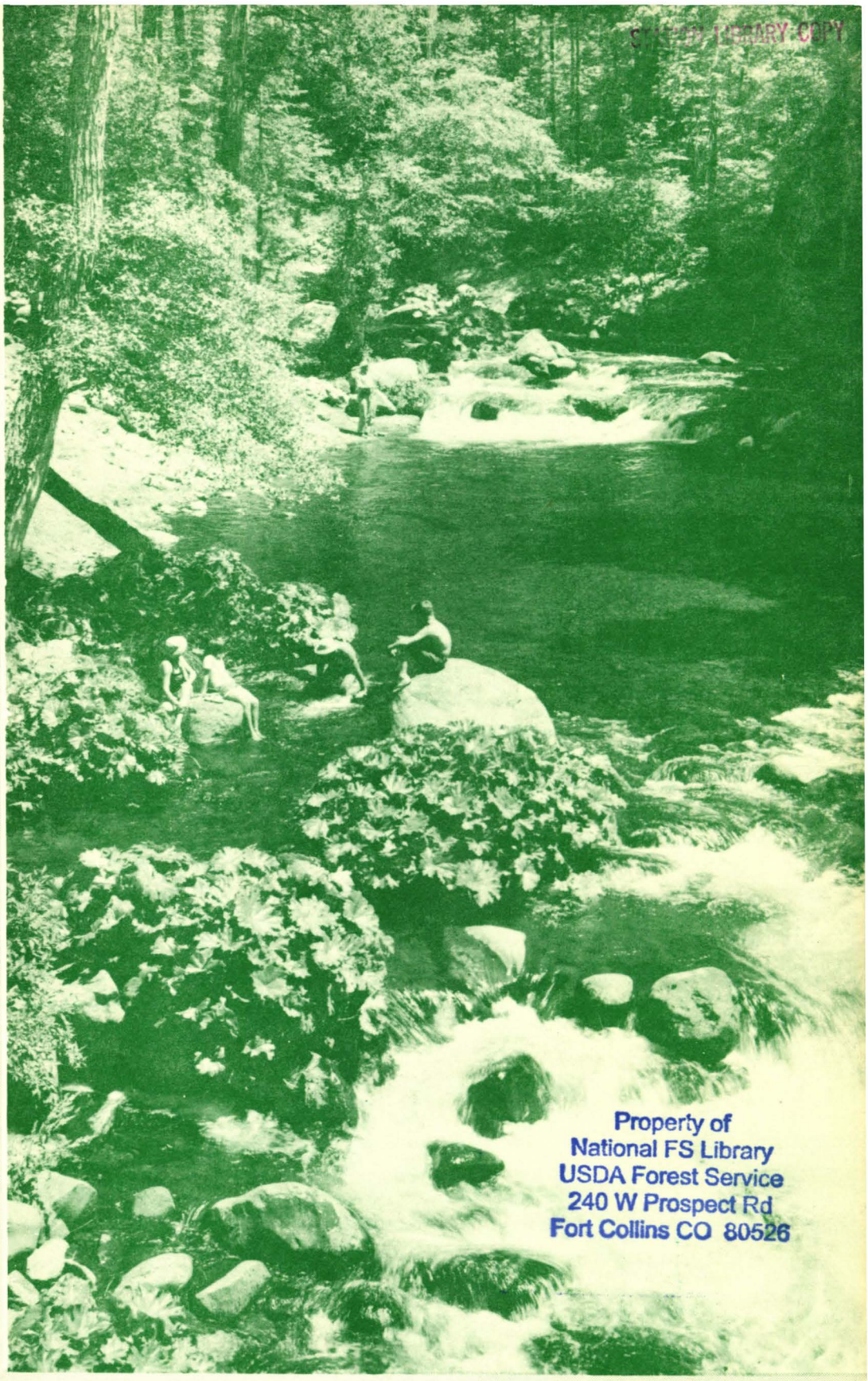

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Report

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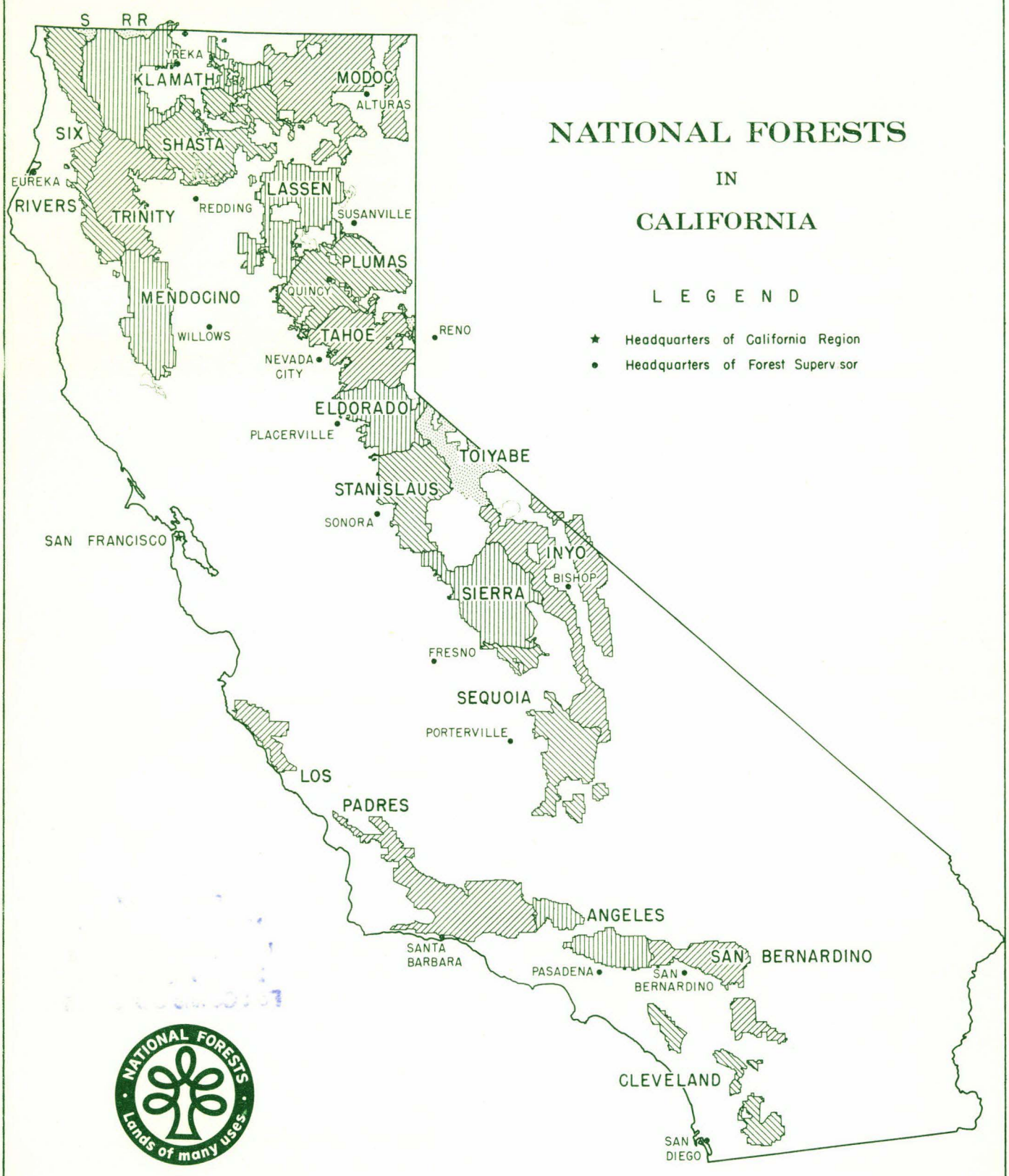
IN the California Region

U.S. Department of Agriculture · Forest Service



NATIONAL FORESTS
IN
CALIFORNIA

L E G E N D

★ Headquarters of California Region

• Headquarters of Forest Supervisor

NATIONAL FORESTS
Lands of many uses

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
CALIFORNIA REGION

1962 was a year of good solid progress on California's National Forests. There was an increased tempo in the development of multiple resources under the Development Program for the National Forests. It was a year in which we were not diverted from our resource management effort by disaster-type forest fires as has happened all too often in recent years.

We completed the job of developing multiple use management plans for each ranger district in the Region. A special management plan was developed for National Forest lands in the Lake Tahoe Basin. The plans are proving to be most useful to our Rangers and Forest Supervisors in carrying out Congressional direction "That the National Forests be managed under principles of multiple use."

As California assumes its role of the Nation's most populous state, management of its natural resources assumes greater importance. More intensive management of the National Forests will assure that they contribute their share. Sale of National Forest timber continues to rise and help support the State's growth. The Region's tree planting program is showing how idle forest acres can be put to work successfully. The National Forests are providing vacation playgrounds — summer and winter — for California's growing millions.

More intensive work is being done to properly manage key watersheds and protect supplies of precious water, stop the loss of valuable top soil, help prevent flood damage.

We still have many problems to solve. The problem of getting sufficient well-designed, well-located roads built fast enough to keep pace with the demand for resource development is a knotty one. Timber losses from insects and disease continue to be troublesome. Man-caused fires continue to plague us. We are undertaking a series of studies to determine how various land management practices affect the yield of water from watersheds. In other words, there is a lot to be done; we are all looking forward to the challenges of 1963.

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Chas. Connaughton

CHAS. A. CONNAUGHTON
Regional Forester

GROWING TIMBER

Pines planted in cleared brush field — Lassen National Forest

MORE INTENSIVE AS NEW

Brush field cleared for planting Shasta-Trinity National Forests

ELIMINATE COMPETING VEGETATION

PROTECT SOIL AND WATER

New nursery at Arcata near Six Rivers National Forest 4 million trees were grown here in 1962 — more will be grown in 1963

GROW BETTER TREES

Badger Hill tree breeding orchard — Eldorado Forest

For AMERICA'S

FORESTRY IS BECOMING A REALITY
WAYS ARE DEVELOPED TO:

PLANT YOUNG TREES SUCCESSFULLY

SPEED UP THE GROWTH OF YOUNG CROP TREES

Thinned stand of young ponderosa pine

FROM LOGGING DAMAGE

CONTROL DESTRUCTION BY INSECTS AND DISEASE

HARVEST MATURE TREES AND
ENCOURAGE RE-GROWTH OF NEW ONES

The product — logs to make lumber for California's booming population

Just the right amount of spray in the right place

FUTURE

An outbreak of the western pine beetle became serious in the Mother Lode country. We cooperated with the California Pest Control Action Council to help cut down losses. While most of the loss was on private land, some 50,000,000 board feet of infested National Forest timber had been sold and logged by October 1st. 143 million feet of timber blown down during the Columbus Day storm in northern California poses an insect threat for next year. It is being sold and salvaged as rapidly as possible.

Safe application of pesticide sprays was stressed where these must be used in direct control work. An improved spray trailer and nozzle which put the spray where needed in safe concentrations were put into use.

Ponderosa pines dying from bark beetle attack

Trees in test plots are being treated with various chemicals in the quest for an herbicide that will control dwarfmistletoe on the pines.

Smog was found to be the culprit in the loss of trees in Southern California from "X-Disease".

Breeding rust-resistant sugar pines — Klamath National Forest

TIMBER SALES

A record 1.5 billion board feet of timber was sold to be harvested from California's National Forests. 1 billion, 349 million feet were actually cut during the year. Pricing changes now provide for accelerated amortization of timber road costs to the purchaser and for adjustment of advertised stumpage rates to provide a more nearly normal profit margin as an average for all species in a given sale. Minimum prices for pine and Douglas-fir were reduced because of depressed market conditions.

Such adjustments are made so that crops of National Forest timber may be harvested in an orderly manner according to good conservation practices. This helps sustain industries and communities heavily dependent on the National Forests for their raw material.

We passed the 100,000 acre mark in the Region's tree planting program. Here Regional Forester Connaughton and Forest Supervisor Joe Flynn help celebrate this event on the Eldorado National Forest.

22,500 acres were seeded and planted to new trees this year.

Oakland Tribune Photo — T. McDonough

Thirty acres of seed production area such as this one were established to insure a reliable supply of seed from high quality trees. Seed provenances were defined on Forests such as the Modoc to assist in collection and classification of seed.

CAL MTN. SEED PRODUCTION AREA
ESTABLISHED 1960
THIS AREA HAS BEEN THINNED CULTIVATED AND FERTILIZED TO ASSURE AN ANNUAL CROP OF SEED. THE METAL BANDS PREVENT LOSS OF SEED TO RODENTS. THE PINE SEED WILL BE USED FOR REFORESTATION OF BURNED OVER TIMBER SITES ON THE LASSEN MODOC AND PLUMAS NATIONAL FOREST
LASSEN NATIONAL FOREST

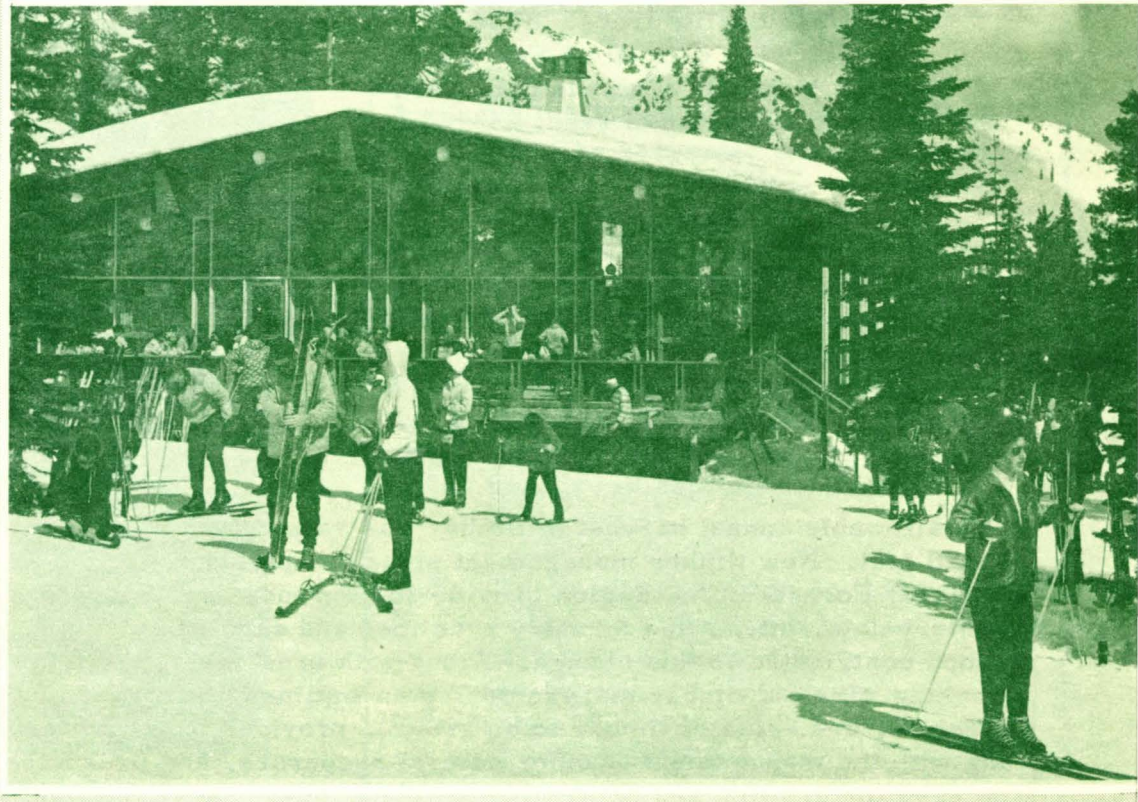
MANAGEMENT PLANS

The allowable annual harvest of timber was raised to a new high of 1,975,500,000 board feet. New timber management plans completed and approved for all the National Forests in the Region provide for the increase. Better growth and inventory data, intensified forestry practices and shorter rotation ages for the timber crops contributed to this change. Along with prescribing the allowable cut for each working circle a timber management plan outlines the management objectives (species, age, size of timber to be grown), provides for coordination of tree growing with the management of other natural resources, and prescribes the systems to be used for growing and harvesting timber crops. These management plans will be kept current through the collection of new inventory and growth data.

Visitors made record use of National Forest winter sports sites during the 1962 snow season. Use rose to approximately 2 million visitor-days. Better snow conditions Statewide accounted for some of the increase. A growing interest in snow sports, expanded facilities and new developments also contributed. $2,000,000 in private capital was spent on these developments. A new facility at Alpine Meadow near Squaw Valley on the Tahoe National Forest was an immediate success. A spectacular $300,000 aerial tramway was opened for public use at Heavenly Valley on the Eldorado National Forest. Money spent by visitors to these areas from all over the West contributed greatly to local economies.

We are continuing studies of areas with potential for future winter sports development.

The "Avalauncher" was a new development designed to prevent avalanches by launching explosive charges into threatening snowfields. It is manufactured commercially and available to ski area operators.



FOR

A new form of National Forest recreation — white water kayak racing on the Feather River, Plumas National Forest

Enjoying the solitude and beauty of the High Sierra Primitive Area

Nearly $70,000 was collected from the public for use of National Forest recreation facilities such as campgrounds, picnic grounds, beaches. The self-service charge systems have been perfected and will be extended to additional areas in 1963.

20 new campgrounds were under construction and 50 others were being rebuilt.

A recreation plan was completed for each of the 17 National Forests. We are now starting on detailed recreation plans for lakes basins, reservoirs, rivers and other key areas. There will be 300 of these to guide us in future planning for use and development of National Forest recreation areas.

Swimmers at Gallatin Beach, Eagle Lake — Lassen National Forest

MILLIONS

Water from the mountains for valleys and cities

Water for fish habitat

Water for recreation

Studies of land management practices and their effects on water yields and water quality are being carried out in the Big Creek area of the Sierra National Forest; tributaries of the Kern River on the Sequoia National Forest; and the Trinity River of the Shasta-Trinity. We are working with the Pacific Southwest Forest and Range Experiment Station in a similar study on the Klamath Forest. We hope to develop techniques for more intensive management of all National Forest watersheds.

There was increasing competition for the waters of springs and streams in the National Forests. The Forest Service filed applications with the State for 57 new water rights for public use and natural resource development.

Forest officers made impact surveys on proposed major water projects to determine possible impacts on National Forest resources. They proposed work to protect and increase resource values.

Projects	National Forest
Cedar Springs Reservoir	San Bernardino
Antelope Reservoir	Plumas
Long Lake Dam	Plumas
Lights Creek Reservoir	Plumas
E. Branch, North Fork Feather River Dam	Plumas
Paskenta Reservoir	Mendocino
Middle Fork, American River Project	Tahoe and Eldorado

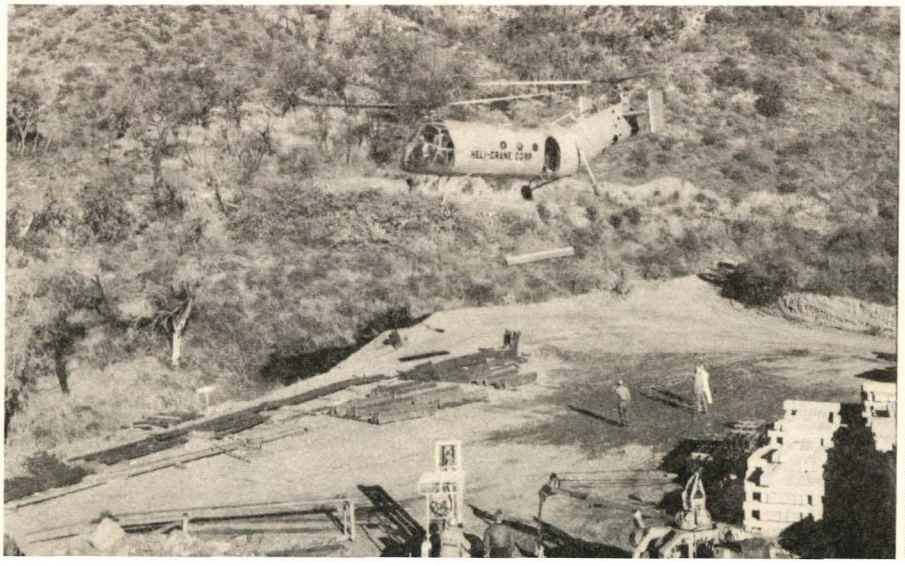
We know of at least 12 major projects to be studied in 1963.

52 meadow restoration projects, 10 streambed stabilization jobs and 10 projects to stabilize abandoned roads were completed.

The plan for the Santa Ynez River Flood Prevention Project on the Los Padres National Forest was updated with a review report. We now have guidelines for completing this work by 1971.

Forest Service work on the Arroyo Grande Cooperative Watershed Project, Los Padres National Forest, was completed in 1962. Work plans for five other cooperative watershed projects involving National Forest land were being prepared or awaiting approval at the end of the year. Part of the San Gabriel River, Angeles National Forest, was included in a work plan which had received approval of the Senate Committee on Agriculture and Forestry but was still being reviewed in the House Committee on Agriculture.

Emergency treatment was given to 8 newly burned areas totaling 16,135 acres. 10 older burns were treated to stabilize soil, control gullies, clear channels, re-establish vegetation, and stop sheet erosion. A regional grass seed bank is being established. 70 tons of grass seed will be stored at Redding and Arcadia for immediate use in reseeding new burns.



Helicopter transporting material to build small dam in backcountry. Angeles National Forest

Numbers of man-caused fires rose to 901 from 825 in 1961 and a 5 year average of 751. Burned acreage on the National Forests was held to about 25,000 acres against a 5 year average of 108,000. This was the second lowest burned acreage on record, achieved despite a year of greater than normal fire danger.

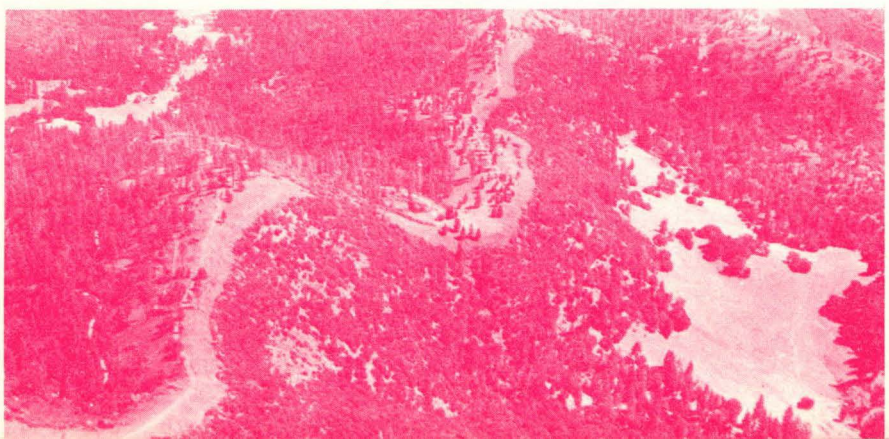
We still have a big job to do in preventing forest fires. More effective removal of hazardous fuels along railroads and highways is needed. We need an effective solution to the problem of children playing with matches. They were responsible for 10 percent of the fires this year and the percentage is increasing.

The Region's new fire control plan was put into effect. Because of financial limitations much of it was implemented only under emergency conditions. According to the plan approximately double the present fire control force is needed to protect California's National Forests and keep resource losses to an acceptable minimum.

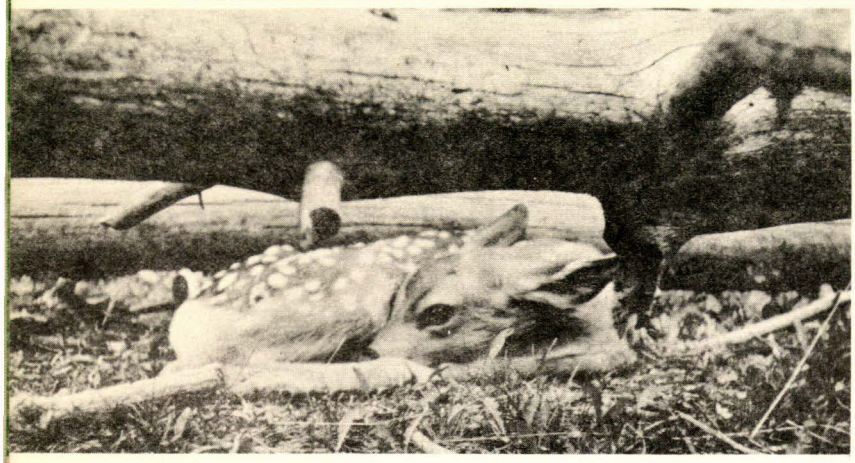
Tests continued on various chemical fire retardants. Diammonium phosphate shows much promise. It may eventually replace borate and bentonite as a retardant to be dropped from air tankers. Other chemicals are being tested for use by ground fire fighting equipment.

2,500 acres of type conversion work was done on Southern California forests such as the Los Padres to break up the big hazardous brushfields into more manageable units. This work also benefits wild animals by providing more edge type and fresh feed.

A 40,000 acre conflagration control project is underway on the Stanislaus National Forest. Land managers and research people are working to determine which land treatment measures are most effective in keeping fires small. Regular improvement work on range, timber and tree planting projects is planned to help reduce fire hazards. Fuelbreaks along ridge tops and canyon bottoms will connect these projects and form an integrated pattern of treated lands. On these, brush and ground fuels are removed; lower limbs are pruned from coniferous trees. Other types of vegetation such as perennial grasses are established to change the fuel type, and give firefighters a chance to control fire. This work helped hold one potentially large fire to a small size during the year. The savings in suppression costs and damages more than equal the cost of the whole project to date.



HABITAT



The National Forests have the job of providing a home for many wild birds, animals, and fish. Demonstrating vividly how multiple use land management works, several forests have taken advantage of fuelbreak and fire barrier projects to improve living conditions for birds and animals. These projects offer chances to create wildlife openings and improved feed conditions on benches, swales, and ridge tops. The Angeles, Mendocino, San Bernardino, and Stanislaus Forests have led the way here.

IN COOPERATION WITH OTHER AGENCIES:

2,800 acres of brush-covered land were improved through prescribed burning, chopping and crushing of brush to create openings and grow fresh feed

46 new water developments were built to furnish drinking water

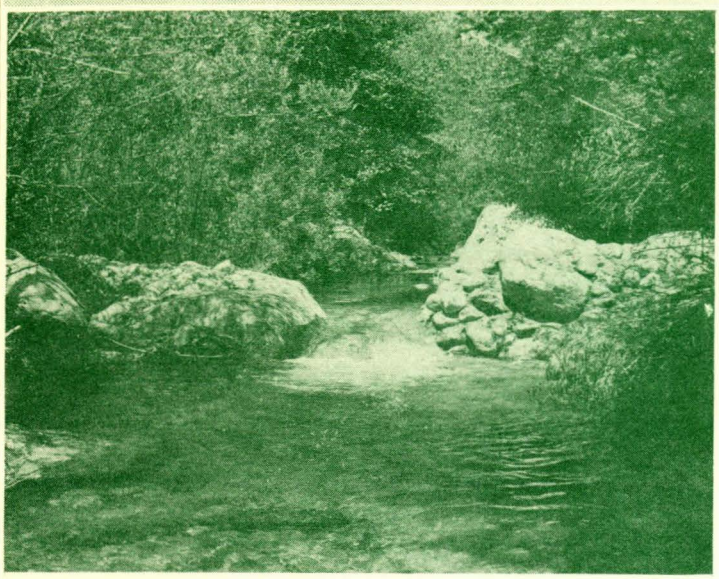
19 exclosures were built to assist wildlife studies

9 miles of stream were improved for fish life

Working with the California Department of Fish and Game our Rangers are making new plans for managing deer habitat. Two of these have been completed on the Sierra National Forest and one each for the Lassen and Mendocino. These will assist local forest officers in managing and improving deer habitat areas more effectively.

We participated with private timber companies in an animal damage survey. This covers problem areas in northwestern California, the northeastern plateau, and the Sierras where young trees have been damaged by bear, porcupine, and deer. The results will be ready for use in developing an action plan in 1963.

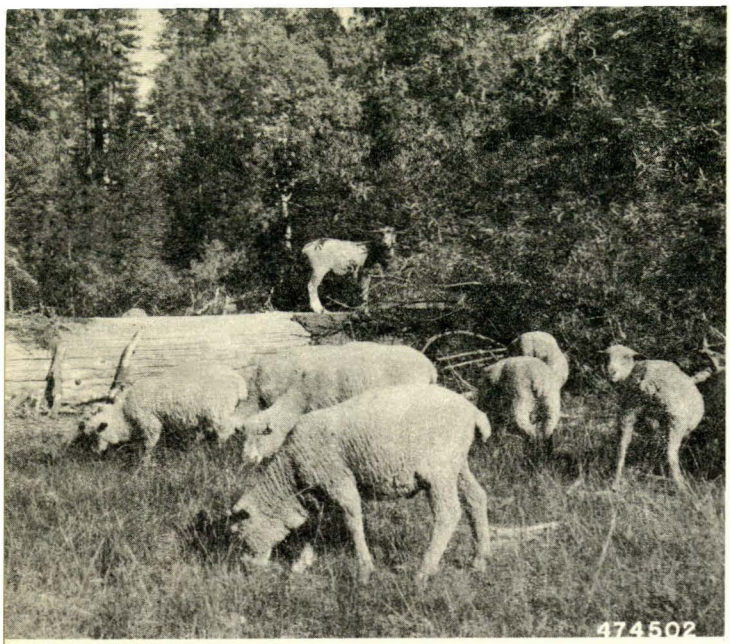
FOR WILDLIFE



Stream improvement work done to create new pools and improve conditions for fish life

Artificial lake built to provide home for fish and recreation for little people

New-type rotary brush cutter being tested. Succulent new sprouts will grow up, furnishing improved deer feed



118,000 head of sheep and their lambs

AND

127,000 head of cattle

belonging to 1,500 California ranchers

grazed on National Forest controlled lands under permit from the Forest Service.

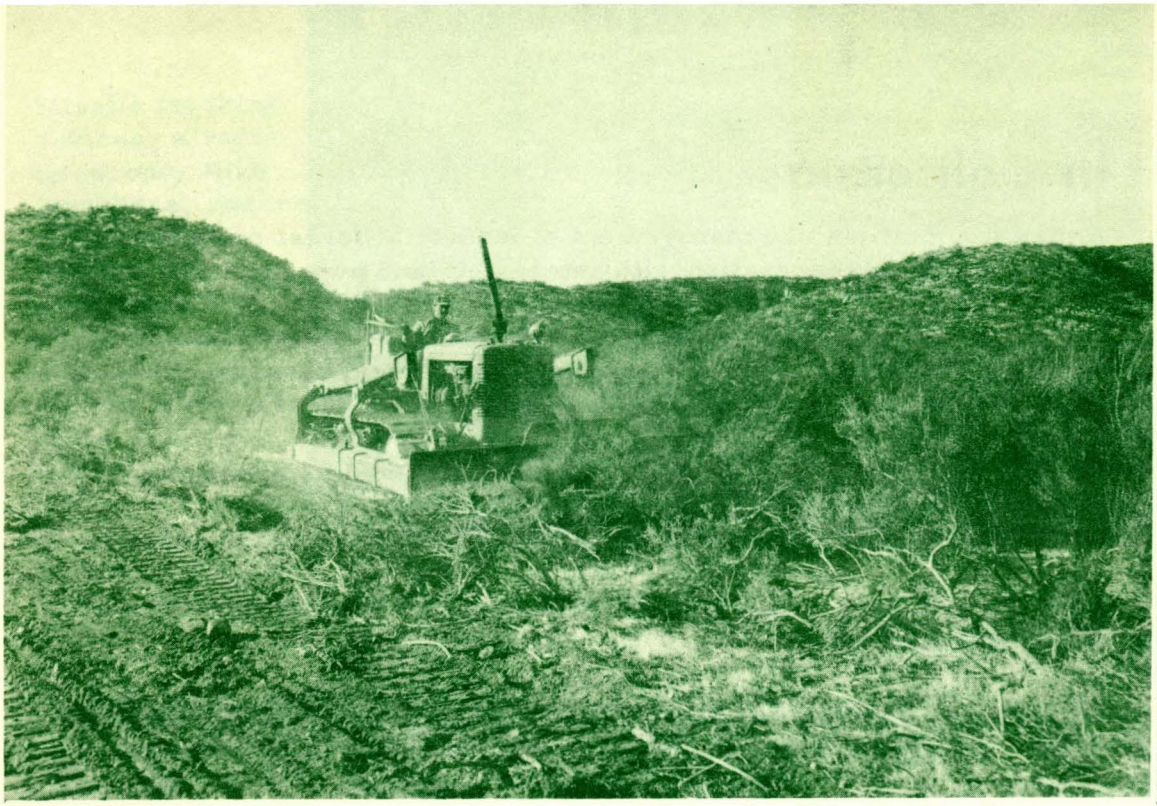
Conservative use of National Forest range supplements home ranch operations and helps build the economy of ranching communities.

96 new range management plans were completed bringing the total to 232

62 range analysis field surveys were completed bringing this total to 611

We expect to have a new management plan for each of the 983 grazing allotments in the Region by the end of 1965.

Each of these is put into effect when completed to get better use of the land, protect the land from damage and increase the yield of forage.



RANGELANDS

TO IMPROVE FEED CONDITIONS FOR THE GRAZING ANIMALS:

4,800 acres were seeded to desirable forage species after land preparation by plowing or disking

13,000 acres of sagebrush range were treated to release the native grass growing under the sagebrush

7,000 acres of chaparral brushland were cleared for conversion to perennial grass

100 acres were treated to control noxious farm weeds such as medusa-head and yellow star thistle

700 acres were treated to remove junipers competing with valuable forage plants

2,680 acres of meadow and other key range were improved by waterspreading projects

Many of these projects improve forest land for use by people, wild animals and birds as well as domestic livestock.

In California:

A plan for multiple use management of industrial forest property was prepared in cooperation with interested land owners.

1,700 land owners received forestry assistance from State service foresters under the cooperative forest management program. Interest in forestry continues to grow among small forest owners.

4,700 acres of State and private lands were planted with young trees.

3,000 acres of State and private lands were seeded with tree seed.

Rural fire defense was strengthened through the cooperative efforts of all fire agencies.

The State Division of Forestry completed a Statewide fire prevention plan. Full implementation of this plan is the big job ahead.

In Hawaii:

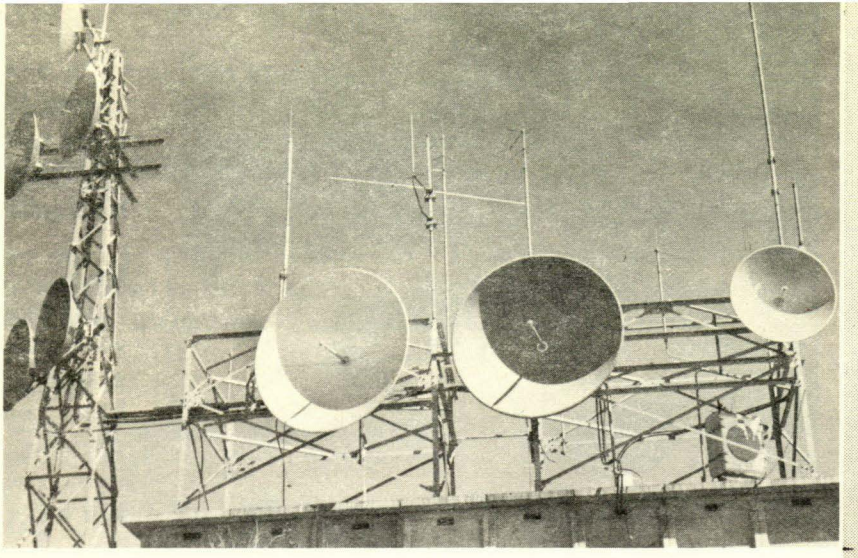
Foresters planted 2,000 acres to new trees.

A new central nursery was established.

The tree planting goal was set at 3,000 acres annually.

We signed a cooperative agreement with the State Forester of Hawaii providing for cooperative handling of forestry work on small watershed projects.

Five-year old plantation of "Australian cedar" replacing native Hawaiian forests which did not produce useable timber. The State of Hawaii is making a big effort to grow timber for its own needs so it will not have to import lumber from overseas.



Missile tracking devices, a radio telescope, Nike launchers, radar warning stations, aircraft control stations, a high altitude research laboratory, radio and television relays — these space age installations all occupy sites on National Forest land under special use permit.

The work of examining National Forest lands for mining claims under the surface rights determination program is almost completed. The main job now is to process protests from individual mining claimants and hold hearings preparatory to full multiple use management of these lands. A mining engineer was assigned to the National Forests of Southern California to assist in this work.

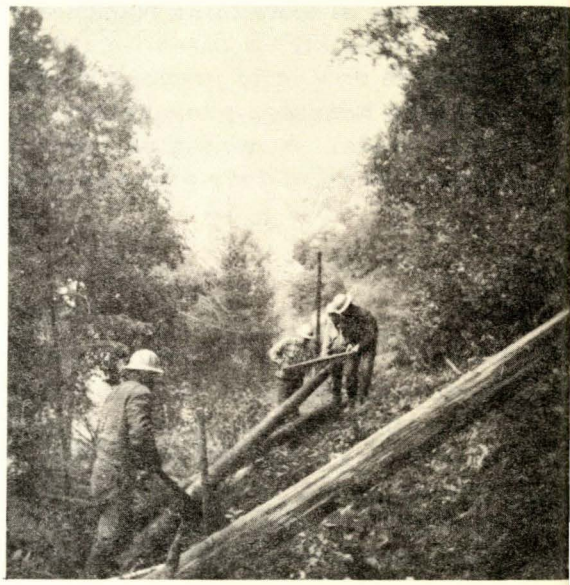
Early in the year we announced a proposal to establish the Minarets Wilderness Area by reclassifying and enlarging the Mount Dana-Minarets Primitive Area. A public hearing on this proposal will be held in Fresno early in 1963. On December 6 we held a public hearing on the proposal to establish the Dome Land Wild Area on the Kern Plateau of the Sequoia National Forest. Several new proposals are expected in 1963.

LANDS

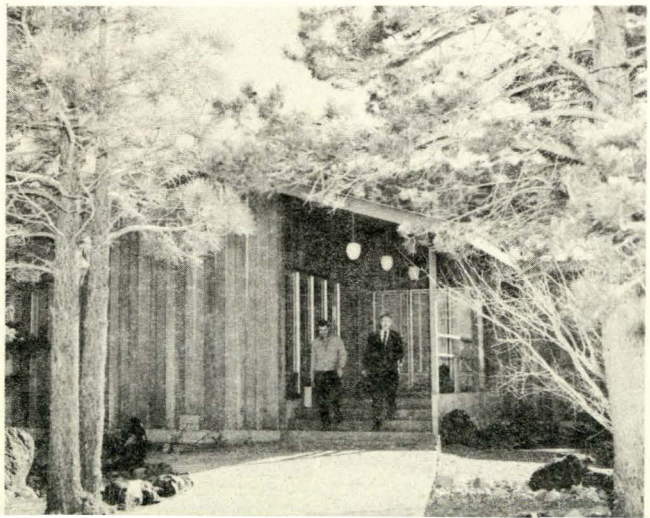
425 miles of roads were built to help meet the increased demand for use of National Forest resources.

Because these roads are built into remote areas with steep slopes and unstable soil conditions, we have concentrated on improving our planning and construction techniques. We have added three professional geologists to our staff, purchased new drilling equipment and added new testing equipment at the Arcadia Testing Laboratory to help do a better job of designing roads in unstable areas.

Many miles of telephone line to key forest points were rebuilt under the Accelerated Public Works Program. This program was designed by Congress to help alleviate unemployment in critical areas. At the same time it helped get many new campgrounds, buildings, and resource conservation projects built on the 9 National Forests that participated.



Buildings completed during 1962 included:



- 4 Ranger Station offices
- 3 barracks buildings
- 4 warehouses
- 5 fire lookouts
- 5 station residences
- 1 mess hall

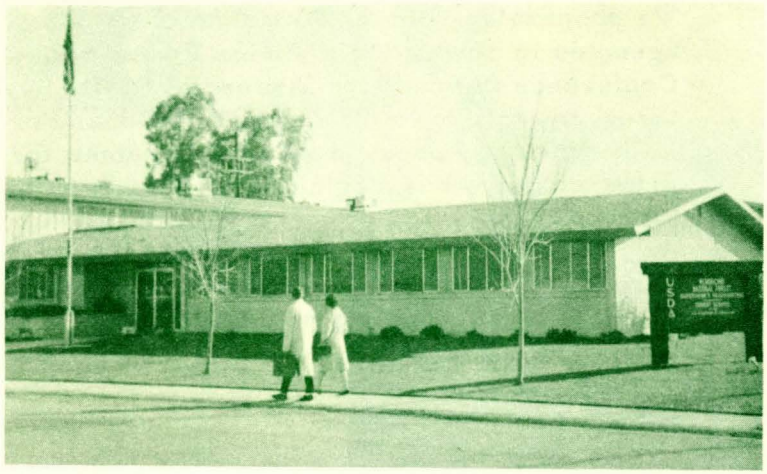
Construction work was started on the Western Forest Fire Laboratory at Riverside.

New office at Leevining Ranger Station, Inyo National Forest

The stepped-up pace of resource management activity called for more people, more buildings, more equipment.

Peak employment for the year was 6,900 people; number of full-time employees — 3,039.

We have stepped up our training program for people in all catagories of work — business managers, foresters, engineers, landscape architects, work supervisors, recreation specialists, range managers, wildlife specialists, and fire control people. Grass roots training sessions have been held to orient new employees and bring others up-to-date on new developments — all so they can do a better job of helping manage the Forests' natural resources.



New or additional rental space was acquired for 5 Forest Supervisor's offices and two Ranger District offices.

Forest fire control techniques have changed rapidly in the past few years. We are participating in a servicewide analysis of the effect these changes have had on the National Forest fire job. The results of this study will give us a better yardstick with which to measure the fire control workload. This will contribute to more efficient work planning in this field.

Over a million dollars' worth of damage was done to National Forest roads, bridges, trails, telephone lines, buildings (3 lookouts were completely destroyed), campgrounds, erosion control projects, wildlife installations and range improvements by the Columbus Day storm. Rangers have taken emergency action to repair critical damage and prevent more. The Accelerated Public Works Program helped get some of this done.

$12,277,086 was collected for the use of National Forest resources. 25% of this amount goes to local counties for roads and schools.

SUMMARY

Visitor Information Services expanded to six National Forests in 1962 — the Eldorado, Inyo, Stanislaus, Sierra, Angeles, San Bernardino. Nature trails, geological study trips, resource management trips and campfire talks added to the understanding and enjoyment of National Forest visitors.

Visitor Centers, demonstration areas, interpretive exhibits and expansion of the program to other forests are in our plans for the future.

We cooperated with the American Legion and other forestry agencies in conducting a Junior Forestry and Conservation Conference in Southern California. Fifty boys were taken on a three-day trip over the Angeles National Forest and San Dimas Experimental Forest to learn more about forestry and land management. The Legion hopes to expand this to an annual Statewide project.

A record $15,400 was contributed to Penny Pines tree planting projects by cooperating organizations.

OUR

Nature's classroom

Learning by seeing

Learn by doing

VISITORS

AGRICULTURE—FOREST SERVICE—SAN FRANCISCO